

*E1*  
*cont*  
(b) a protein comprising the amino acid sequence of at least one of  
the domains B1, B2, B3 or B4 of (a); [or] and

(c) a protein comprising the sequence of multiples or mixtures of  
the domains of B1, B2, B3 or B4 of (a).

#### REMARKS

Reconsideration of the above application in light of the above amendment and following remarks is respectfully requested. Claims 14-20 are pending in the application. Claim 14 has been amended to Markush format in accordance with the Examiner's suggestions by telephonic interview on August 17, 1999 and to use proper abbreviation for the sequence identification number. No new matter has been added.

#### Substitute Specification

In the Office Action, the Examiner stated that Applicants' prior amendments to the specification were not entered. These amendments were directed to adding "SUMMARY OF INVENTION" to page 5, line 3 and to making minor changes in the order of material presented at pages 5 and page 9 of the originally filed specification. The Examiner requested that Applicants provide a substitute specification incorporating these amendments. A substitute specification will be submitted in due course.

#### Double Patenting

The Examiner rejected claims 14, and 18-20 under the judicially created doctrine of obviousness-type double-patenting over claims 1-14 of U.S. Pat. No. 4,876,194 (the '194 patent). Claims 15-17 were similarly rejected over the '194 patent in view of Guss et al.. The Examiner maintains that the L protein disclosed in the '194 patent as having the ability to bind immunoglobulin light chains and containing fragments with the same property is the same, or an obvious variant of the present invention drawn comprising SEQ ID NO: 1 or specified L protein domains.

Applicants submit that this ground of rejection is obviated by the present amendment which recites the claimed composition in Markush format according to the Examiner's suggestion in the telephonic interview of August 17, 1999. More specifically, the claims now recite that the protein is selected from the group consisting of a protein

comprising SEQ ID NO: 1 or one of the specified domains B1, B2, B3 or B4 defined in the subject specification. The '194 patent fails to identify any sequence of an L protein or define the domains for any fragment thereof that bind to immunoglobulin light chains. As discussed during the interview, (and in Applicants' response filed on September 27, 1997) obtaining the sequence of the L protein and identification of particular domains that bind immunoglobulin light chains was unusually difficult. Accordingly, one of ordinary skill in the art could not easily expect to obtain the present sequences and domains thereof based on the 95 kD gel identified protein of the '194 patent because of the unusual structural features of the L-protein.

Further, it is generally known in the art of protein biochemistry that mere possession of a protein and a description of a functional properties (e.g., immunoglobulin binding as described in the '194 patent) does not render the sequence of the protein or identification of functional domains obvious. Knowledge of a property of a protein does not enable one of ordinary skill in the art to predict structures or substructures (i.e., sequences or domains) that cause the property. Many important proteins of the prior art have been purified and characterized and yet particularly defined sequences or functional domains have remained elusive. This is particularly true for proteins such as the L proteins of the present invention which have unexpected features that render structural determination difficult.

Obviousness-type double patenting pertains to claims drawn to obvious variations of a previously patented invention. In contrast, Applicants submit that that the precise sequence of SEQ ID NO: 1 and binding domains thereof are non-obvious over the teaching of the '194 patent. Applicants therefore request the Examiner to withdraw the rejection of claims 14 and 18-20 based on obviousness-type double-patenting.

#### Rejections under 35 U.S.C. § 102.

The Examiner rejected claims 14 and 18-20 under 35 U.S.C. § 102(a) as allegedly anticipated over Kastern et al. *J. Biol. Chemistry* 267(18) 12820 (1992). Applicants submit that Kastern et al., is not citeable against the present invention because it is the work of the inventors. A declaration to this effect pursuant to 37 C.F.R. § 1.132 will be submitted in due course.

Claims 14 and 18-20 were rejected under 35 U.S.C. § 102(b) as being anticipated by EP 0 255,487. The same claims were separately rejected as being anticipated

by the '194 patent. The Examiner alleges that each of these documents disclose an L protein and subfragments thereof which bind to an immunoglobulin light chain.

Applicants respectfully submit the present amendment obviates this ground of rejection. Briefly, it is well settled that to anticipate, each and every element of the claimed invention must be disclosed in a single reference. The presently amended claims recites a Markush group that includes a specified sequence of an L protein and specified domains thereof. Neither the sequence or the domains are disclosed in the cited art. Accordingly, neither of the references anticipate the present claims.

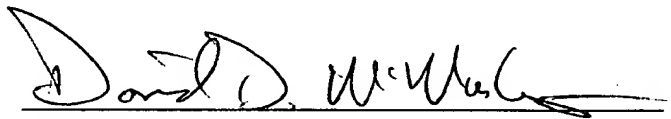
Therefore, Applicants respectfully request the Examiner to withdraw the rejection of claims 14, and 18-20 on grounds of alleged anticipation under 35 U.S.C. § 102(a) or 102(b).

All of the claims remaining in the application are now clearly allowable. Favorable consideration and a Notice of Allowance are earnestly solicited. The Examiner is respectfully encouraged to contact the undersigned attorney at (206) 622-4900 should any questions remain.

Respectfully submitted,

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Enclosures:

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Petition for Extension of Time (+2)

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